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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/014,117	10/26/2001	Tuan Le	6074-A	3923

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08/26/2003

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EXAMINER

DUNWOODY, AARON M

ART UNIT

PAPER NUMBER

3679

DATE MAILED: 08/26/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Applicati n No.

10/014,117

Applicant(s)

LE, TUAN

Examiner

Aaron M Dunwoody

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address.

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 28 May 2003.
- 2a) ☒ This action is FINAL. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-6,8-10 and 12-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 6,8 and 9 is/are allowed.
- 6) ☒ Claim(s) 1, 10 and 12-20 is/are rejected.
- 7) ☒ Claim(s) 2-5 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 26 October 2001 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____.
- 4) ☐ Interview Summary (PTO-413) Paper No(s) _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

DETAILED ACTION

Drawings

In order to avoid abandonment, the drawing informalities noted in Paper No. 4, mailed on 2/11/03, must now be corrected. Correction can only be effected in the manner set forth in the above noted paper.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 10, 11, 14, 16 and 17 are rejected under 35 U.S.C. 102(b) as being anticipated by US patent 4226164, Carter.

In regards to claim 10, Carter discloses a coupler in the form of a nut (22), the nut having two end faces and an annular hole extending between the two end faces along an axis, the coupler comprising the nut having two separable sectors (24, 26) joined along mating surfaces, the mating surfaces comprising a portion defined by a set of lines parallel to the axis of the annular hole and a portion perpendicular to the axis; and wherein the portion of the mating surfaces defined by lines parallel to the axis prevents relative movement of the sectors in a plurality of radial directions and the portion of the mating surfaces that is perpendicular to the axis prevent relative movement of the sectors in a plurality of axial directions when the sectors are assembled together.

In regards to claim 11, Carter discloses a coupler comprising two sectors forming respective first and second sectors (24, 26) of a nut (22) and defining an annular hole for surrounding ends of the two conduits, wherein each of the two sectors has means for preventing movement (52, 56) of the first sector relative to the second sector in a first axial direction and means for preventing movement of the first sector relative to the second sector in a second axial direction.

In regards to claim 14, Carter discloses a combination, comprising a first conduit (14) having an outwardly extending flange (18) on an end of the first conduit, a second conduit (12) having bosses or threads (16) extending radially outward on an end of the second conduit, a coupler (22) forming an annular hole, coupler having portions (24, 26) defining the annular hole, the portions having an inwardly extending flange that receives and holds the outwardly extending flange on the end of the first conduit and lugs or threads that couple to the bosses or threads on the end of the second conduit for a coupled configuration; and wherein the coupler comprises two sectors connected in fixed relation by relative radial movement in a snap lock action.

In regards to claim 16, Carter discloses the two sectors snapping locking together with the portions defining the annular hole surrounding the first conduit and retained thereon by interference of the flanges.

In regards to claim 17, Carter discloses ribs and grooves (52, 56) on the two sectors, wherein ribs seat in grooves in the fixed relation and limit radial movement in a plurality of directions, and wherein the first conduit stops relative radial movement of the two sectors in all remaining directions.

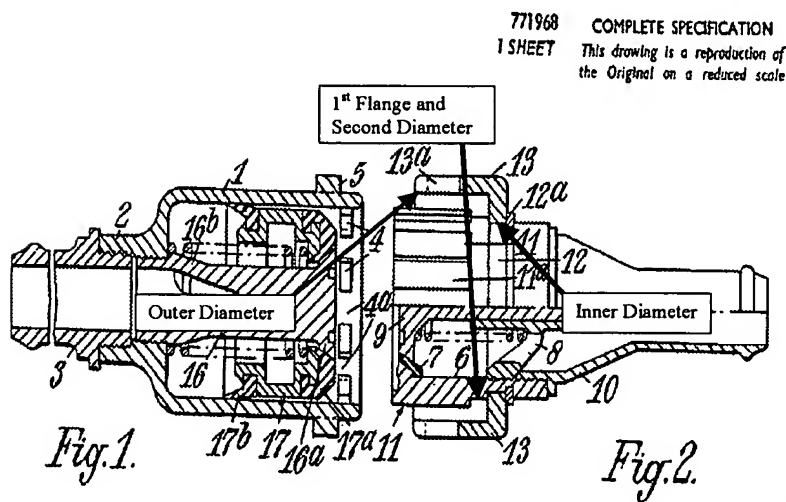
Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1, 10 and 12-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over patent GB 771968, Steer-Webster in view of Carter.

In regards to claim 1, in figures 1 and 2 below,



Steer-Webster discloses a coupler for joining a first conduit (10, 11) having a first diameter (12) and a second conduit (1), the first conduit having an axis and a first outwardly extending flange having a second diameter axially spaced from a second outwardly extending flange (12a) having a third diameter, the coupler comprising a housing (13) including an annular hole having an outer diameter and an inner diameter; the outer diameter of the annular hole

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being greater than the second diameter of the first outwardly extending flange; the inner diameter of the annular hole being greater than the first diameter of the first conduit, to permit axial movement of the coupler over the first conduit; the inner diameter of the annular hole being less than the second diameter of the first outwardly extending flange and less than the third diameter of the second outwardly extending flange to prohibit movement of the portions of the housing defining the annular hole axially along the first conduit over either of the first outwardly extending flange and the second outwardly extending flange; whereby the coupler is moveable over the first outwardly extending flange to engage the second conduit, with a portions of the sectors defining the annular hole disposed between the first outwardly extending flange and the second outwardly extending flange. Steer-Webster does not disclose the housing and the annular hole being formed with at least two sectors radially compressible into a snap fit relationship with the portions of the sectors defining the annular hole disposed between the first outwardly extending flange and the second outwardly extending flange. Carter teaches the housing (22) and the annular hole being formed with at least two sectors (24, 26) radially compressible into a snap fit relationship with the portions of the sectors defining the annular hole to provide a split coupling nut which may be readily releaseably interlockingly engaged with each other (col. 1, lines 53-57). It would have been obvious to one having ordinary skill in the art at the time the invention was made to fabricate the housing and the annular hole with at least two sectors radially compressible into a snap fit relationship with the portions of the sectors defining the annular hole to provide a split

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coupling nut which may be readily releaseably interlockingly engaged with each other, as taught by Carter.

In regards to claim 10, Steer-Webster in view of Carter discloses a coupler in the form of a nut, the nut having two end faces and an annular hole extending between the two end faces along an axis, the coupler comprising the nut having two separable sectors joined along mating surfaces, the mating surfaces comprising a portion defined by a set of lines parallel to the axis of the annular hole and a portion perpendicular to the axis; and wherein the portion of the mating surfaces defined by lines parallel to the axis prevents relative movement of the sectors in a plurality of radial directions and the portion of the mating surfaces that is perpendicular to the axis prevent relative movement of the sectors in a plurality of axial directions when the sectors are assembled together, the mating surfaces that is perpendicular to the axis comprising a stopping flange (52).

In regards to claim 12, Steer-Webster in view of Carter discloses a coupler (22) for coupling two conduits (12, 14) together by a bayonet twist and lock action comprising a nut having an annular hole extending axially between two end faces, the nut having portions (24, 26) defining the annular hole, the portions comprising an inwardly extending flange for rotational retention on a first of the two conduits, the portions having lugs (32, 34) protruding radially inwardly thereon for sliding past bosses of a second of the two conduits in bayonet twist action; wherein the coupler comprises a locking flange protruding axially from an end face of the coupler, the locking flange

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having a socket adapted to engage a protrusion on the second of the two conduits for bayonet lock action.

In regards to claim 13, Steer-Webster in view of Carter discloses a pipe combination, comprising a first pipe having a first end with a first bayonet tube disposed at the first end; a second pipe having a second end with an annular space defined between a first annular flange and a second annular flange, the first annular flange having a diameter greater than the diameter of the annular space; a pipe coupler having a wall with an axial bore extending between opposing first and second faces, the axial bore having a diameter; first portions of the coupler extending into the bore at the first face, the first portions having a diameter greater than the diameter of the annular space and less than the diameter of the first flange; second portions of the coupler extending into the bore and forming a second bayonet tube; the coupler being adapted for disposition at an operative site with the first portions of the coupler disposed in the space of the first pipe; the coupler being rotatable at the operative site to engage the first bayonet tube with the second bayonet tube and to draw the second end of the second pipe into fluid communication with the first end of the first pipe; and the coupler being formed in at least two separate parts adapted to be radially snap fit to form the coupler at the operative site.

In regards to claim 14, Steer-Webster in view of Carter discloses a coupler and conduits combination, comprising a first conduit having an outwardly extending flange on an end of the first conduit, a second conduit having a fastener extending radially outward on an end of the second conduit, a coupler forming an annular hole, coupler

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having portions defining the annular hole, the portions having an inwardly extending flange that receives and holds the outwardly extending flange on the end of the first conduit and complementary fastener that couples to the fastener on the end of the second conduit for a coupled configuration; and wherein the coupler comprises two sectors connected in fixed relation by relative radial movement in a snap lock action; wherein each of the two sections has a stopping flange that prevents relative axial movement of the sectors.

In regards to claim 15, Steer-Webster in view of Carter discloses the first conduit having a second outwardly protruding flange that prevents axial movement of the coupler along the first conduit.

In regards to claim 16, Steer-Webster in view of Carter discloses the two sectors snapping lock together with the portions defining the annular hole surrounding the first conduit and retained thereon by interference of the outwardly and inwardly extending flanges.

In regards to claim 17, Steer-Webster in view of Carter discloses ribs and grooves on the two sectors, wherein ribs seat in grooves in the fixed relation and limit radial movement in a plurality of directions, and wherein the first conduit stops relative radial movement of the two sectors in all remaining directions.

In regards to claim 18, Steer-Webster in view of Carter discloses the first conduit having a nipple (11a) on the end; and the nipple is surrounded by the coupler.

In regards to claims 19 and 20, Steer-Webster discloses the claimed invention except for a method of using a coupler in the form of a nut having a first sector and a

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second sector defining an annular hole extending between end faces of the nut. It would have been obvious to one having ordinary skill in the art at the time the invention was made to provide a method of using a coupler in the form of a nut having a first sector and a second sector defining an annular hole extending between end faces of the nut, since, under the principles of inherency, if a prior art device, in its normal and usual operation, would necessarily perform the method claimed, then the method claimed will be considered to be anticipated by the prior art device. When the prior art device is the same as a device described in the specification, it can be assumed the device will inherently perform the same process. *In re King*, 802 F.2d 1324, 231 USPQ 136 (Fed. Cir. 1986).

Claims 1 and 10-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over patent GB 771968, Steer-Webster in view of Sampson.

In regards to claim 1, in figures 1 and 2 above, Steer-Webster discloses a coupler for joining a first conduit (10, 11) having a first diameter (12) and a second conduit (1), the first conduit having an axis and a first outwardly extending flange having a second diameter axially spaced from a second outwardly extending flange (12a) having a third diameter, the coupler comprising a housing (13) including an annular hole having an outer diameter and an inner diameter; the outer diameter of the annular hole being greater than the second diameter of the first outwardly extending flange; the inner diameter of the annular hole being greater than the first diameter of the first conduit, to permit axial movement of the coupler over the first conduit; the inner diameter of the

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annular hole being less than the second diameter of the first outwardly extending flange and less than the third diameter of the second outwardly extending flange to prohibit movement of the portions of the housing defining the annular hole axially along the first conduit over either of the first outwardly extending flange and the second outwardly extending flange; whereby the coupler is moveable over the first outwardly extending flange to engage the second conduit, with a portions of the sectors defining the annular hole disposed between the first outwardly extending flange and the second outwardly extending flange. Steer-Webster does not disclose the housing and the annular hole being formed with at least two sectors radially compressible into a snap fit relationship with the portions of the sectors defining the annular hole disposed between the first outwardly extending flange and the second outwardly extending flange. Sampson teaches the housing (49) and the annular hole being formed with at least two sectors radially compressible into a snap fit relationship with the portions of the sectors defining the annular hole to provide a system which is virtually foolproof in achieving a locked, coupled state, and which is very difficult for operators to misuse (col. 2, lines 36-39). It would have been obvious to one having ordinary skill in the art at the time the invention was made to fabricate the housing and the annular hole with at least two sectors radially compressible into a snap fit relationship with the portions of the sectors defining the annular hole to provide a system which is virtually foolproof in achieving a locked, coupled state, and which is very difficult for operators to misuse, as taught by Sampson.

In regards to claim 10, Steer-Webster in view of Sampson discloses a coupler in the form of a nut, the nut having two end faces and an annular hole extending between

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the two end faces along an axis, the coupler comprising the nut having two separable sectors joined along mating surfaces, the mating surfaces comprising a portion defined by a set of lines parallel to the axis of the annular hole and a portion perpendicular to the axis; and wherein the portion of the mating surfaces defined by lines parallel to the axis prevents relative movement of the sectors in a plurality of radial directions and the portion of the mating surfaces that is perpendicular to the axis prevent relative movement of the sectors in a plurality of axial directions when the sectors are assembled together, the mating surfaces that is perpendicular to the axis comprising a stopping flange (50).

In regards to claim 11, Steer-Webster in view of Sampson discloses a coupler comprising two sectors forming respective first and second sectors of a nut and defining an annular hole for surrounding ends of the two conduits, wherein each of the two sectors has means for preventing movement of the first sector relative to the second sector in a first axial direction and means for preventing movement of the first sector relative to the second sector in a second axial direction.

In regards to claim 12, Steer-Webster in view of Sampson discloses a coupler for coupling two conduits together by a bayonet twist and lock action comprising a nut having an annular hole extending axially between two end faces, the nut having portions defining the annular hole, the portions comprising an inwardly extending flange for rotational retention on a first of the two conduits, the portions having lugs protruding radially inwardly thereon for sliding past bosses of a second of the two conduits in bayonet twist action; wherein the coupler comprises a locking flange protruding axially

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from an end face of the coupler, the locking flange having a socket adapted to engage a protrusion on the second of the two conduits for bayonet lock action.

In regards to claim 13, Steer-Webster in view of Sampson discloses a pipe combination, comprising a first pipe having a first end with a first bayonet tube disposed at the first end; a second pipe having a second end with an annular space defined between a first annular flange and a second annular flange, the first annular flange having a diameter greater than the diameter of the annular space; a pipe coupler having a wall with an axial bore extending between opposing first and second faces, the axial bore having a diameter; first portions of the coupler extending into the bore at the first face, the first portions having a diameter greater than the diameter of the annular space and less than the diameter of the first flange; second portions of the coupler extending into the bore and forming a second bayonet tube; the coupler being adapted for disposition at an operative site with the first portions of the coupler disposed in the space of the first pipe; the coupler being rotatable at the operative site to engage the first bayonet tube with the second bayonet tube and to draw the second end of the second pipe into fluid communication with the first end of the first pipe; and the coupler being formed in at least two separate parts adapted to be radially snap fit to form the coupler at the operative site.

In regards to claim 14, Steer-Webster in view of Sampson discloses a coupler and conduits combination, comprising a first conduit having an outwardly extending flange on an end of the first conduit, a second conduit having a fastener extending radially outward on an end of the second conduit, a coupler forming an annular hole,

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coupler having portions defining the annular hole, the portions having an inwardly extending flange that receives and holds the outwardly extending flange on the end of the first conduit and complementary fastener that couples to the fastener on the end of the second conduit for a coupled configuration; and wherein the coupler comprises two sectors connected in fixed relation by relative radial movement in a snap lock action; wherein each of the two sectors has a stopping flange that prevents relative axial movement of the sectors.

In regards to claim 15, Steer-Webster in view of Sampson discloses the first conduit having a second outwardly protruding flange that prevents axial movement of the coupler along the first conduit.

In regards to claim 16, Steer-Webster in view of Sampson discloses the two sectors snapping lock together with the portions defining the annular hole surrounding the first conduit and retained thereon by interference of the outwardly and inwardly extending flanges.

In regards to claim 17, Steer-Webster in view of Sampson discloses ribs and grooves on the two sectors, wherein ribs seat in grooves in the fixed relation and limit radial movement in a plurality of directions, and wherein the first conduit stops relative radial movement of the two sectors in all remaining directions.

In regards to claim 18, Steer-Webster in view of Sampson discloses the first conduit having a nipple (11a) on the end; and the nipple is surrounded by the coupler.

In regards to claims 19 and 20, Steer-Webster discloses the claimed invention except for a method of using a coupler in the form of a nut having a first sector and a

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second sector defining an annular hole extending between end faces of the nut. It would have been obvious to one having ordinary skill in the art at the time the invention was made to provide a method of using a coupler in the form of a nut having a first sector and a second sector defining an annular hole extending between end faces of the nut, since, under the principles of inherency, if a prior art device, in its normal and usual operation, would necessarily perform the method claimed, then the method claimed will be considered to be anticipated by the prior art device. When the prior art device is the same as a device described in the specification, it can be assumed the device will inherently perform the same process. *In re King*, 802 F.2d 1324, 231 USPQ 136 (Fed. Cir. 1986).

Response to Arguments

Applicant's arguments filed 5/28/03 have been fully considered but they are not persuasive. The applicant argues that the line of Steer-Webster is a flange or anything else. The Examiner disagrees. It is clear from the illustration of Figure 2 of Steer-Webster that the line is a flange that meets the limitations of claim 1.

The applicant argues that Steer-Webster in view of Carter does not disclose a stopping flange as cited in amended claim 10 of the instant application. The Examiner disagrees. Carter discloses a stopping flange (52) which meets the limitation of claim 10.

Allowable Subject Matter

Claims 7 and 11 are canceled by the Applicant in paper no. 7, filed 5/28/03.

Claims 6, 8 and 9 are allowed.

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Claims 2-5 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).


A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Aaron M Dunwoody whose telephone number is (703) 306-3436. The examiner can normally be reached on Monday - Friday between 7:30 am to 4:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lynne H Browne can be reached on (703) 308-1159. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-1113.

.amd 


David Bochna
Patent Examiner